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ADC System Components
Accessories

Fitting Instructions

Additional Image Hard Disk(s) for ULTRA SPARC 1 / ULTRA SPARC 10

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1. General Information

- This documentation describes the installation of additional hard disk(s) for an already installed system, based on:

  - Processing Station Software **DIPS1.0.03 with ULTRA SPARC 1**

  - Processing Station Software **VIPS1.0.05 or higher.** VIPS1.0.05 or higher supports all sizes of SCSI disks, formatted in BSD format e.g. SUN HD
    . **with ULTRA SPARC 1 and ULTRA SPARC 10.**

  The installation of the PCI-SCSI board is not described in this document. Please refer to the document “PCI ULTRA SCSI HOST Adapter – Installation guide”, delivered with the board.

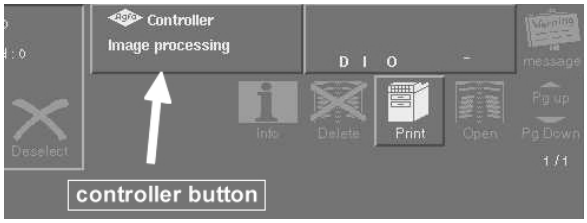
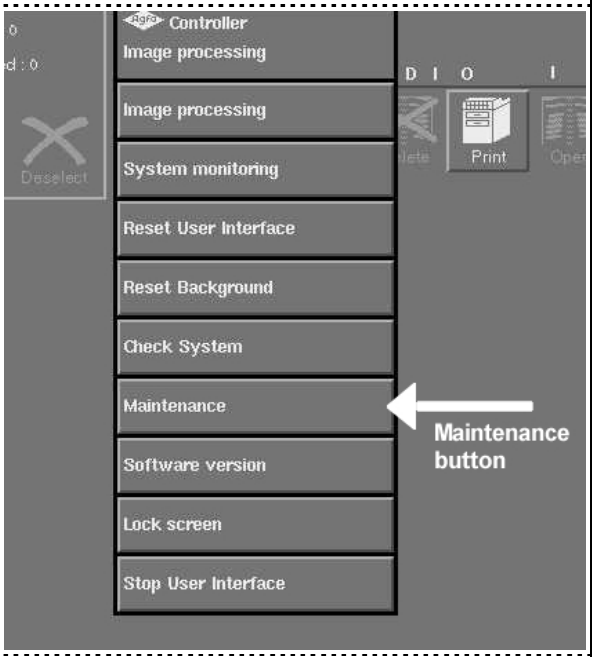
- If the Processing Station has been delivered including external hard disks, the configuration is already done.
  The hard disk(s) just have to be connected.

- To get a workable system (with flexible user interface) for VIPS 1.0.05 or earlier, it is recommended to install not more than 9 GB of HDD size. Installation of more disk size causes problems like crashes of the autodelete function, disks which become completely full and crashes of the whole system, a non flexible user interface, a very slow system, ... The problem will be solved with VIPS1.0.06 or higher.

- Interface:
  - ULTRA SPARC 1: SCSI–BUS on controller 0
  - ULTRA SPARC 10: WIDE SCSI-BUS on PCI-SCSI board (upper connector)

- If a hard disk has to be disconnected in case of defect, this hard disk(s) must be de-installed by the “De-installation procedure” (see point 3 “De-Installation of a Hard Disk” page 7). **Otherwise the system will crash!!**

2. Installation Procedure

No.	Procedure Steps	Display / Comment
1.	• Switch on the Processing Station.	The Processing Station boots and login prompt appears.
2.	• Login!	
3.	• Click **<Controller>**	

4.	• Select **<Maintenance>** in the controller pull-down menu.	`Maintenance password >`
		`Maintenance Password ok.`
		`No match`

5.	• enter maintenance password and hit **<Return>**.	`1 Connect  Connect via Telnet to a network node`
		`2 Install  Tools to setup DIPS/VIPS`
		`3 Repair  Tools to repair DIPS/VIPS`
		`4 Tools  UNIX Tools`
		`5 Help  Documentation about (V)DIPS`
		
		`Enter selection (// to exit) [?,??,q]:`

No	Procedure Steps	Display / Comment
6.	• Select: **2** install and hit **<Return>** **3** `Hardware` and hit **<Return>** **1** `Harddisk` and hit **<Return>** **1** `ShowSCSI` and hit **<Return>**	A list of the used, reserved and free SCSI IDs is displayed. ☞ **for ULTRA SPARC 1:** Look for the next free Image disk(s) and note the respective SCSI ID(s). ☞ **for ULTRA SPARC 10:** if no external hard disk is connected, no list of SCSI ID's for the PCI-SCSI board is displayed. The following line appears: `Enter selection:`
7.	• select **2** `DiskInstall` and hit **<Return>**	An instruction how to proceed is displayed. Then the following line appears: `Are you ready to proceed with the installations:`
8.	• type **y**	The Processing Station shuts down
9.	• **switch off** all connected devices.	
10.	• Connect the external hard disks	**for ULTRA SPARC 1:** set the noted SCSI ID(s) on the hard disk(s) see step 6. The DAT tape should be the last device of the external SCSI BUS **for ULTRA SPARC 10:** connect the external hard disk(s) to the upper connector of the PCI-SCSI board and set free SCSI IDs (highlighted) see table

for ULTRA SPARC 1:	
Device	SCSI ID
1st internal disk	0
2nd internal disk	1
1st external disk - /images 2	**2**
2nd external disk- /images 3	**3**
4mm DAT-drive	4
3rd external disk - /images 4	**5**
Internal CD-ROM	6
SCSI controller 0	7

for ULTRA SPARC 10 (upper connector)**:**	
Device	SCSI ID
1st external disk - /images 10	**0**
2nd external disk - /images 11	**1**
3rd external disk - /images 12	**2**
4th external disk - /images 13	**3**
5th external disk - /images 14	**4**
6th external disk - /images 15	**5**
7th external disk - /images 16	**6**
PCI-SCSI controller board	7

No.	Procedure Steps	Display / Comment
11.	• Power on peripherals and Processing Station again !	
12.	• Immediately when the monitor comes up press **<Stop>** and **<A>** - Key simultaneously to get the **<OK>** prompt.	
13.	• type **probe-scsi-all**	The following text is displayed: This command may hang the system when it tries to probe the SCSI-Bus. Then you have to switch off and on the Workstation by means of the power switch and try it once again. Please type reset-all to reset the system before executing this command. Then the following line appears: `Do you whish to continue:`
14.	• type **y**	The test will be performed and all connected SCSI – devices will be displayed like in the following examples. The examples may be different for different hardware configurations.
15.	• Check the new added hard disk(s). If they are well connected, they should be in the listing of SCSI-IDs now (see table next page)	If the system hangs, switch off / on the (V)DIPS via the main switch and start again with step11.

Example for ULTRA SPARC 1:

```
ok probe-scsi-all
/iommu@f,e0000000/sbus@f,e0001000/espdma@f,400000/esp@f,800000
Target 1
  Unit 0    Disk    SEAGATE ST31200W SUN1.05872400472716
                    Copywright (c) 1994 Seagate
                    All rights reserved 0000
Target 2
  Unit 0    Disk    SEAGATE ST31200W SUN1.05872401455278
                    Copywright (c) 1994 Seagate
                    All rights reserved 0000
Target 3
  Unit 0    Disk    SEAGATE ST31200W SUN1.05872400812433
                    Copywright (c) 1994 Seagate
                    All rights reserved 0000
Target 4
  Unit 0    Removable Tape          Archive Python 24454-XXX24ASB
Target 6
  Unit 0    Removable Read Only Device   TOSHIBA XM-4101TASUNSLCD404/14
ok
```

Example for ULTRA Sparc 10:

```
ok probe-scsi-all
/pci@1f,0/pci@1/scsi@1,1
Target 1
  Unit 0    Disk    Quantum  SUN4.2G8619
Target 2
  Unit 0    Disk    Quantum  SUN4.2G8619
/pci@1f,0/pci@1/scsi@1
Target 4
  Unit 0    Removable Tape          Archive Python 24454-XXX24ASB
Ok
```

No.	Procedure Steps	Display / Comment

16.	• type **boot -r**	The system boots up and displays after a few minutes:
		`Please log on as root and enter:/mimosa.install`
		`hit return to continue...`

17.	• hit **<Return>**	`DIPS console login:`
18.	• type **root** and hit **<Return>**	`Password: .....`
19.	• type in the password	
20.	• # type **/mimosa.install**	`OK to run with option init:`
21.	• type **yes**	`New disk detected on SCSI-Idx` (x stands for set SCSI ID) `Indicate the purpose of this disk (images/other)?`
22.	• type **i** for images	`Format and initialize the image disk?`

No.	Procedure Steps	Display / Comment
23.	• type **`y`**	Step 22 / 23 repeat for every new Hard disk. The following window appears: `OK to reboot:`
24.	• type **`y`**.	The Processing Station reboots and the UI starts.
25.	• Check the complete installation of the added hard disk(s) via the Controller menu by selecting **<System Monitoring>** and **<Disk>** afterwards.	Installation done.

The number of the image partitions depends on the selected SCSI ID. Therefore the image partitions have not to be a continuous series of numbers.

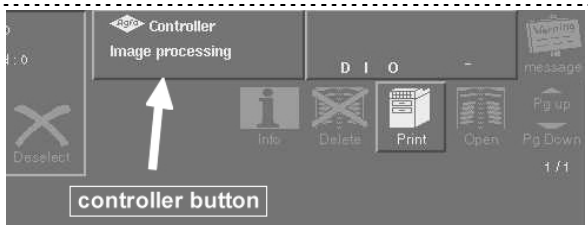
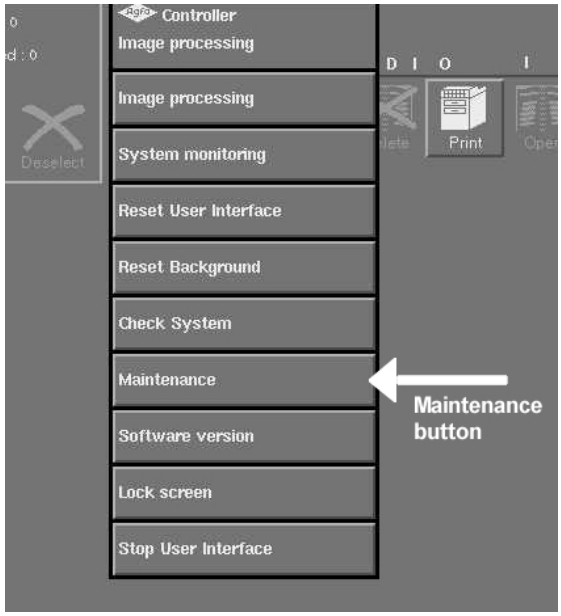
3. De-Installation of a Hard Disk

When do you have to de-install a hard disk?

If an installed hard disk has to be disconnected
- due to a hardware defect
- because the hard disk is not needed anymore.

A hard disk must not be disconnected without the de-installation procedure. This will crash the system !

If a hard disk has been de-installed, the stored images are lost.

No.	Procedure Steps	Display / Comment
1.	• Switch on the Processing Station.	The Processing Station boots and login prompt appears.
2.	• Login!	
3.	• Click **<Controller>**	

4.	• Select **<Maintenance>** in the controller pull-down menu.	`Maintenance password >`
		`Maintenance Password ok.`
		`No match`

5.	• enter maintenance password and hit **<Return>**.	`1 Connect  Connect via Telnet to a network node`
		`2 Install  Tools to setup DIPS/VIPS`
		`3 Repair  Tools to repair DIPS/VIPS`
		`4 Tools  UNIX Tools`
		`5 Help  Documentation about (V)DIPS`
		
		`Enter selection (// to exit)`
		`[?,??,q]:`

No	Procedure Steps	Display / Comment
6.	• Select: **2** install and hit **<Return>** **3** `Hardware` and hit **<Return>** **1** `Harddisk` and hit **<Return>** **3** `DiskDeInstall` and hit **<Return>**	An instruction how to proceed is displayed. Then the following line appears: `Are you ready to proceed with the deinstall:`
7.	• type **`yes`**	A list of the current installed hard disks is displayed. `Select disk to deinstall (//to end):`
8.	• Type the number of the disk to de-install	`**Warning**:All images on the disk will be inaccessible to MIMOSA.` `>OK to deinstall / images xy.`
9.	• Type **`yes`**	`>Wipe all the images from the disk?`
10.	• Type **`yes`**	`/Select disk to deinstall (// to end):`
11.	• Repeat Step 7 – 10 for further disks to de-install or type `//` to end the selection.	Then the following line appears: `Do you want to continue?:`
12.	• type **`yes`**	The Processing Station shuts down
13.	• Switch off all connected devices when the Processing Station is shut down.	
14.	• Disconnect the selected hard disk(s)	
15.	• Power on the remaining peripherals and the Processing Station again !	The Processing Station boots and the UI starts.
16.	• Check the de-installation of the hard disk(s) via the Controller menu by selecting **<System Monitoring>** and **<Disk>** afterwards.	De-Installation done.